IN THE CLAIMS:

1. (Currently Amended) A method of stimulating growth and differentiation of mammalian pancreatic epithelial cells into three-dimensional cystic-ductular structures containing insulin-secreting cells wherein said pancreatic epithelial cells are isolated from fetal ~~or adult~~ pancreas, said method comprising culturing said pancreatic epithelial cells in the presence of a bone morphogenetic protein (BMP) and at least one of laminin-1 or laminin-1-containing extracellular matrix ECM for a time and under conditions sufficient for colonies to form wherein said colonies comprise three-dimensional cystic-ductular structures containing insulin-secreting cells.

2. (Previously Presented) The method of Claim 1 wherein the BMP molecule is a member of the TGF-β family.

3. (Previously Presented) The method of Claim 2 wherein the BMP molecule is a heterodimer from two or more BMP molecules.

4. (Previously Presented) The method of Claim 1 wherein laminin-1 is provided at a concentration of from about 1 μg/ml to about 1000 μg/ml.

5. (Currently Amended) A method of stimulating or otherwise facilitating formation of colonies of mammalian pancreatic epithelial cells, wherein said pancreatic epithelial cells are isolated from fetal ~~or adult~~ pancreas and said colonies comprise three-dimensional cystic-ductular structures containing insulin-secreting cells, said method comprising culturing said pancreatic epithelial cells in the presence of a bone morphogenetic protein (BMP) and at least one of laminin-1 or laminin-1-containing extracellular matrix ECM for a time and under conditions sufficient for said colonies to form.

6-7. (Canceled)

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8. (Previously Presented) The method of Claim 5 wherein the BMP molecule is a member of the TGF-β family.

9. (Previously Presented) The method of Claim 8 wherein the BMP molecule is a heterodimer from two or more BMP molecules.

10. (Previously Presented) The method of Claim 5 wherein laminin-1 is provided at a concentration of from about 1 μg/ml to about 1000 μg/ml.

11. (Previously Presented) The method of Claims 1 or 5 wherein the pancreatic epithelial cells are embryonic stem cells-derived precursor cells that are committed to the pancreatic lineage.

12. (Currently Amended) A method of stimulating or otherwise facilitating formation of cystic epithelial colonies containing insulin-secreting cells, said method comprising culturing mammalian pancreatic epithelial cells in the presence of a BMP and at least one of laminin-1 or laminin-1-containing extracellular matrix ECM for a time and under conditions sufficient for said colonies to form, wherein said pancreatic epithelial cells are isolated from fetal ~~or adult~~ pancreas, and wherein said colonies comprise existing detected structures containing insulin-secreting cells.

13. (Previously Presented) The method of Claim 12 wherein the BMP molecule is a member of the TGF-β family.

14. (Previously Presented) The method of Claim 13 wherein the BMP molecule is a heterodimer from two or more BMP molecules.

15. (Previously Presented) The method of Claim 12 wherein laminin-1 is provided at a concentration of from about 1 μg/ml to about 1000 μg/ml.

16-32. (Canceled)

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